

IN THE CLAIMS

Please amend Claims 1, 6, 11, 14 and 21 as indicated.

Please cancel Claims 2, 8, 9, 15 and 20 without prejudice and without disclaimer of subject matter.

Please add new Claims 22-24 as indicated.

1. (Currently Amended) A system for correcting wide-angle image data, said system comprising:

a first input buffer configured to store wide-angle image data;

an image data processor operably coupled to said first input buffer and configured to transform wide angle image data stored in the first input buffer into corrected image data on a pixel-by-pixel basis; and

an encoder operably coupled to said image data processor and configured to receive and encode the corrected image data in a format suitable for at least one of display and recording of corrected images, ~~and wherein~~ said corrected image data is being transmitted from the image data processor to the encoder upon completion of each pixel transformation and not being stored in a buffer from the time of transformation by the image data processor until the time said undistorted image data is received by the encoder.

2. Cancelled

3. (Original) A system according to claim 1, further comprising:

a look-up table memory operably coupled to the image data processor, said look-up table memory being configured to store transformation calculation data to be used by the image data processor to transform wide angle image data stored in the first input buffer into corrected image data.

4. (Original) A system according to claim 1, further comprising:

a user input module operably coupled to the image data processor and configured to provide user command data to the image data processor.

5. (Original) A system according to claim 4, wherein:

said user input module is further configured to calculate a value based on user input, and to communicate said calculated value to the image data processor; and

said image data processor is further configured to use said calculated value to transform wide angle image data stored in the first input buffer into corrected image data.

6. (Currently Amended) A system according to claim 1, wherein said image data processor comprises a processing device, ~~selected from the group consisting essentially~~ the processing device being at least one of a field programmable gate array and an application specific integrated circuit.

7. (Original) A system according to claim 1, further comprising a source of wide-angle image data operably coupled to said first input buffer.

8. Cancelled

9. Cancelled

10. (Original) A system according to claim 7, wherein said source of wide-angle image data comprises a video camera.

11. (Currently Amended) A system according to claim 10 wherein the video camera produces video signals in a standard format, ~~selected from the group consisting essentially~~ the standard format being one of PAL, SECAM and NTSC.

12. (Original) A system according to claim 1, further comprising a monitor operably coupled to said encoder for displaying corrected images.

13. (Original) A system according to claim 1, wherein the wide-angle image data includes distortion and said image data processor transforms the wide-angle image data in the first input buffer into corrected image data that is substantially undistorted.

14. (Currently Amended) A method for displaying and/or recording corrected image data from wide-angle image data, said method comprising steps of:

buffering wide-angle image data;

transforming the buffered wide-angle image data into corrected image data on a pixel-by-pixel basis; and

transmitting the corrected image data to an encoder upon completion of each pixel transformation without buffering the corrected image data;

encoding the corrected image data into one or more output signals, ~~without buffering the corrected image data;~~ and

displaying and/or recording the output signals from the encoder.

15. Cancelled

16. (Original) A method according to claim 14, further comprising steps of:

storing transformation calculation data in a look-up table; and

using transformation calculation data stored in the look-up table to transform the buffered wide angle image data stored into corrected image data.

17. (Original) A method according to claim 14, further comprising steps of:

providing user command data to the image data processor; and

using the user command data to transform the buffered wide angle image into corrected image data.

18. (Original) A method according to claim 17, further comprising steps of:
calculate a value based on user command data; and
using said calculated value to transform the buffered wide angle image data into corrected image data.
19. (Original) A method according to claim 14 wherein the step of transforming the buffered wide-angle image data into corrected image data corrects distortion in the wide-angle image data such that the output signals are representative of a substantially undistorted image.
20. Cancelled.
21. (Currently Amended) A system for correcting wide-angle image data, said system comprising:
means for storing wide-angle image data;
means for transforming wide angle image data stored in said storage means into corrected image data on a pixel-by-pixel basis, said image transformation means being operably coupled to said storage means; and
means for encoding the corrected image data into a format suitable for at least one of display and recording of corrected images, said corrected image data being transmitted from the image transformation means to the encoder means upon completion of each pixel transformation without storing the corrected image data in a buffer from the time of transformation by the image transformation means until the time the corrected image data is received by the encoder means, said encoder means being operably coupled to said image transformation means.
22. (New) A system according to claim 1, wherein the encoded corrected data comprises an output signal, and wherein said image data processor transforms a pixel of said wide angle image data if the data for the pixel is required for the output signal.

23. (New) A method according to claim 14, further comprising transforming a pixel of the wide-angle image data if the data for the pixel is required for the one or more output signals from the encoder.
24. (New) A system according to claim 21, wherein the encoded corrected image data comprises an output signal, and wherein said image transformation means transforms a pixel of said wide angle image data if the data for the pixel is required for the output signal.